FIGURE 10

GGGCACAAAGCTCCGCAGCCTGAGCGAGCGTCATTAGCTTGTCAGTCGGAACCAT

TACCCCTTTCCTCTTCGCTGGCTAGCGAATGATAGGGAATGCTAGCCAGCGAACAA

GATTAGAGCACAGAAAGTATA**GCCAGCGAATCAACAGCATAAC**AACTTAGAGATTTCTTGCAT

TCCCCAGACGGTATCAAGTCATAGTGGAGAATAATCATAATAAGATTTGTGAAAATG

TTTGTGTAGATTAATGTGTAAAATTCAATCCAT**CAACCATGAAGTGAAGTGCATTC**CGTTTTTAA

ATGTTTATTGTATTTGAATGAATAAACAGTTTACACGCGAAAATCCCTACTTTATGTG

CGTACAAACTATGATTTTTTTTGCAGTATATAAAAGTTTCCACTATCGTAATTATTTTC

CAGATCCGTCTTCTTAACAACCCGATTTCCTAGCATCCATCTGCGTGGAATAAATCT

ATTGAATTATTAACCCTTGTGATTGGCTAAAAAAAAAA

Figure 10. Sequence of LP2-3 differential display fragment, 507 nucleotides, clone LPS-097.

FIGURE 11

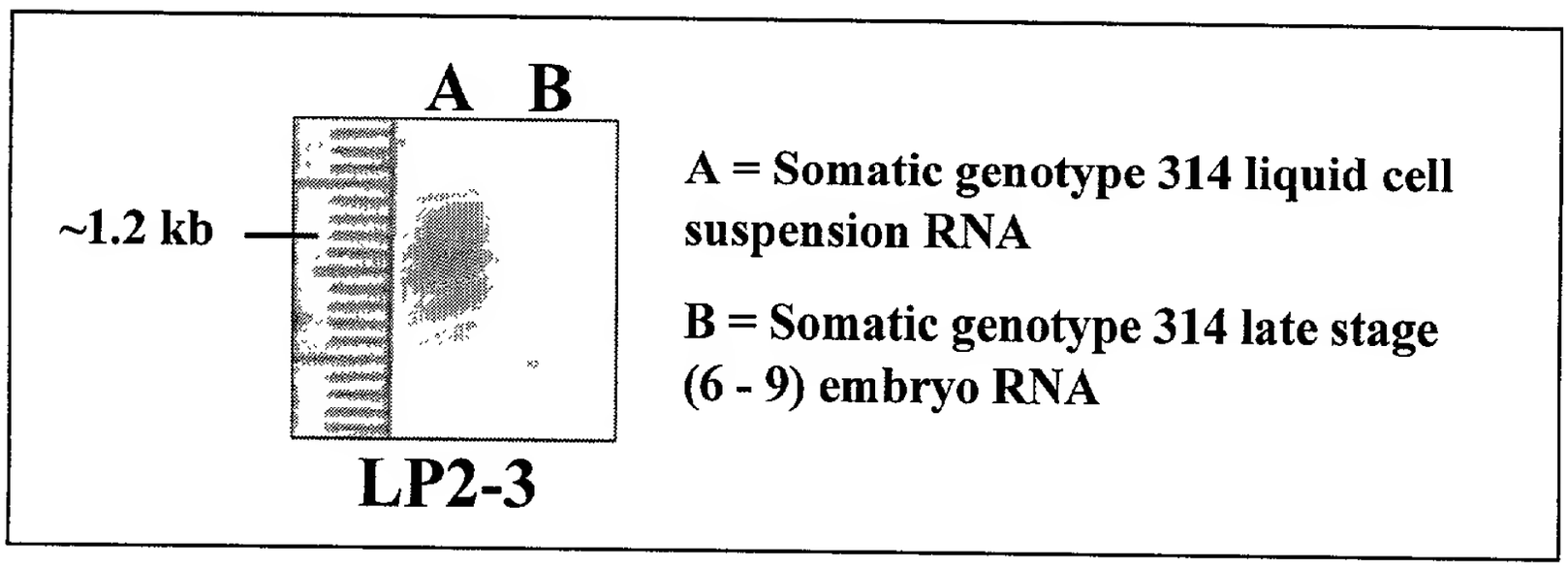
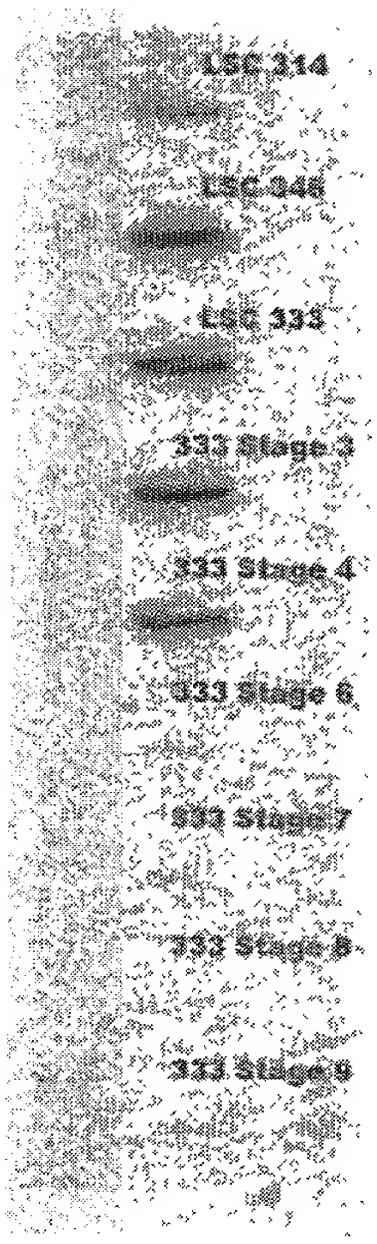
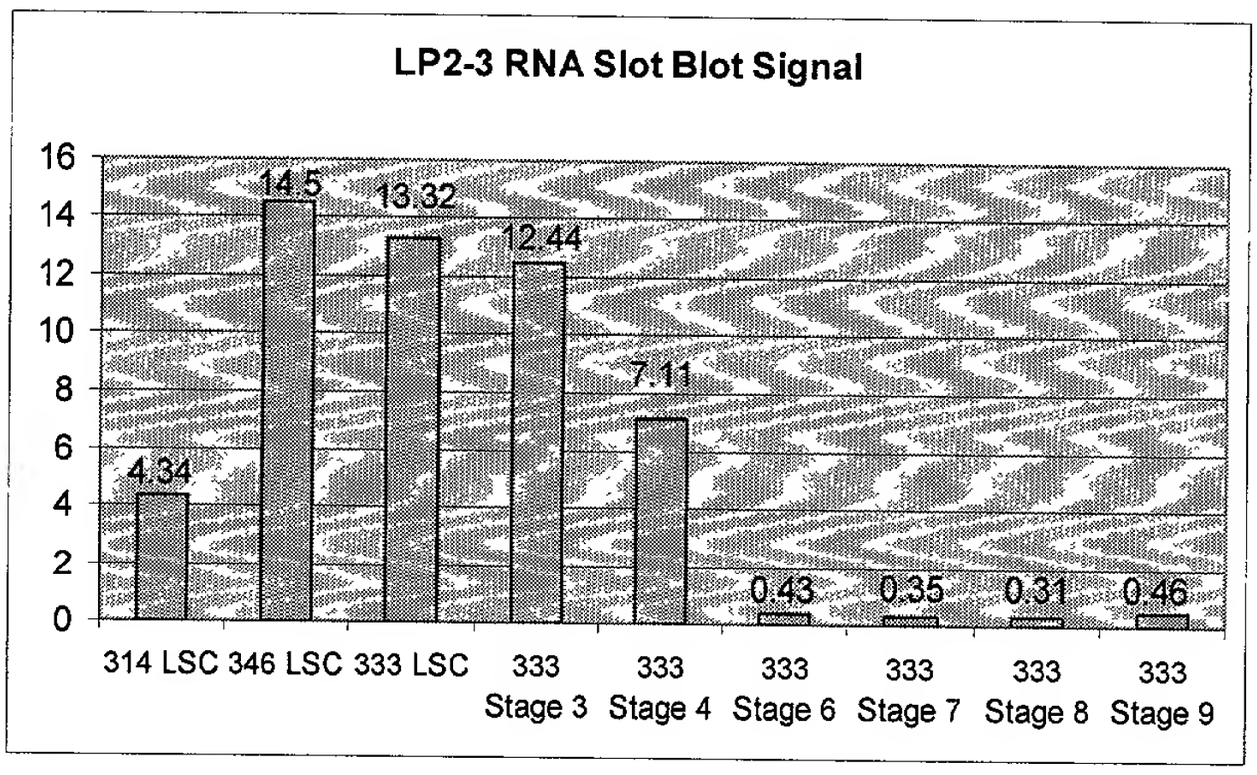


Figure 11. Expression of LP2-3 Gene: Northern Blot of total RNA isolated from Liquid Suspension Culture (Stages 1-3) and Late Stage (Stage 9) Loblolly Pine Somatic Embryos (Pullman & Webb 1994).

FIGURE 12





Figures 12A & 12B. Image (1A) and quantification (1B) of a total RNA slot blot probed with an LP2-3-specific probe. For each somatic embryo tissue (liquid suspension culture (LSC) genotypes 314, 346, and 333, and genotype 333 stages 3, 4, 6, 7, 8, and 9) two micrograms of total RNA was attached at each position on the membrane. This blot shows that LP2-3 mRNA is most abundant in early stage somatic embryos, especially when they are in the liquid multiplication medium, and decreases rapidly as embryos begin to mature on maturation medium. It is also apparent that when comparing genotypes, there is variability in LP2-3 abundance in LSC.